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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,892	04/26/2006	Naotaka Tsunoda	279196US6PCT	1764

22850 7590 04/30/2010  
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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ROBINSON, RYAN C

ART UNIT	PAPER NUMBER
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2614

NOTIFICATION DATE	DELIVERY MODE
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04/30/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/560,892	<b>Applicant(s)</b> TSUNODA, NAOTAKA	
	<b>Examiner</b> Ryan Robinson	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/16/2005; 2/22/2007</u> .                                   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/29/2010 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1, 3-4, 6, 12 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimura et al., U.S. Patent No. 4,058,688, published on 11/15/1977, (hereby Nishimura).**

4. As to claim 1, Nish discloses a headphone apparatus (Fig. 3), comprising: a baffle portion (46) forming outer edges of the headphone apparatus and surrounding a space except a front opening portion of a driver unit (10), the baffle portion (46) being

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formed of an air-permeable porous material (Col. 2, lines 63-65) such that air from outside the apparatus permeates through the material and external sound is prevented from being trapped interior to the baffle portion, degrading sound quality.

5. As to claim 11, Nish remains as applied above. Nish further discloses a back housing portion (8, 28) formed to cover a back surface of a driver unit (10), the back housing portion (28) being formed of an air-permeable porous material (Col. 3, lines 8-9) such that external sound is prevented from being trapped interior to the back housing portion, degrading sound quality.

6. As to claim 3, Nish remains as applied above. Nish further discloses that an opening (12) is made in a back surface of said back housing portion (8, 28).

7. As to claim 4, Nish remains as applied above. Nish further discloses that the air-permeable porous material of the back housing portion (28) comprises an unwoven fabric of chemical fiber (Col. 3, lines 8-9).

8. As to claim 6, Nish remains as applied above. Nish further discloses that the driver unit (10) is provided in a bridge portion (34) shaped like an arch forming a bridge to a rim (18) which forms a frame.

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9. As to claim 12, Nish remains as applied above. Nish further discloses that the driver unit (10) is provided in a bridge portion (34) shaped like an arch forming a bridge to a rim (18) which forms a frame.

10. As to claim 18, Nish remains as applied above. Nish further discloses that the back housing portion (8) is an outermost surface of the headphone apparatus.

**11. Claims 1-2, 7 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Görike et al., U.S. Patent No. 4,278,852, published on 7/14/1981, (hereby Görike).**

12. As to claim 1 Görike discloses a headphone apparatus (Fig. 15), comprising: a baffle portion (64, 65) forming outer edges of the headphone apparatus and surrounding a space except a front opening portion of a driver unit (51), the baffle portion (64) being formed of an air-permeable porous material such that air from outside the apparatus permeates through the material (The material disclosed is loose felt; Col. 11, line 14) and external sound is prevented from being trapped interior to the baffle portion, degrading sound quality.

13. As to claim 2, Görike remains as applied above. Görike further discloses that the (64, 65) is approximately cone-shaped.

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14. As to claim 7, Görike remains as applied above. Görike further discloses that the cone shape of said baffle portion (64, 65) is asymmetrical with respect to an axis of the cone.

15. As to claim 14, Görike remains as applied above. Görike further discloses that the air-permeable porous material of the baffle portion comprises an unwoven fabric of chemical fiber (The material disclosed is loose felt; Col. 11, line 14).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**17. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Görike et al., U.S. Patent No. 4,278,852, published on 7/14/1981, (hereby Görike), in view of Sheffer, U.S. Publication No. 2003/0134553, published on 7/17/2003, (hereby Sheffer).**

18. As to claim 15, Görike remains as applied above. Görike does not explicitly disclose that that the air-permeable porous material of the baffle portion comprises a cellulose based material. However, Görike does not limit the material to a specific

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composition, and teaches that the material should be selected based on the desired acoustic properties (Col. 6, lines 7-10). Furthermore, air permeable porous materials comprising a cellulose based material for sound absorption were well known. Sheffer discloses a cellulose based (Para. 0132, lines 1-5) material (12) for use as a sound absorbing material. Therefore, it would have been obvious, at the time of Applicant's invention to provide a known material, as the air-permeable porous material taught by Sheffer, in the baffle portion taught by Görike, as a design choice.

19. As to claim 16, Görike remains as applied above. Görike does not explicitly disclose that the unwoven fabric of chemical fiber of the baffle portion is combined with a porous material through an air-permeable adhesive layer to stabilize a shape of the fabric. However, combining a porous material through an air-permeable adhesive layer was well known. Sheffer teaches combining an unwoven fabric (Para. 0058, lines 3-4) of chemical fiber (12) with a porous material (22) through an air-permeable adhesive layer (26) to stabilize a shape of the cellulose based material. Therefore, it would have been obvious, at the time of Applicant's invention to provide a known material, as the air-permeable porous material taught by Sheffer, in the baffle portion taught by Görike, as a design choice.

20. As to claim 17, Görike and Sheffer remain as applied above to claim 15. Sheffer further discloses that said cellulose based material (12) of the baffle portion is combined with a porous (The material is air permeable and therefore porous; Para. 0086, lines 3-

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4) material (26) through an air-permeable adhesive layer (26) to stabilize a shape of the cellulose based material (12).

**21. Claims 5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al., U.S. Patent No. 4,058,688, published on 11/15/1977, (hereby Nishimura), in view of Sheffer, U.S. Publication No. 2003/0134553, published on 7/17/2003, (hereby Sheffer).**

22. As to claim 5, Nishimura remains as applied above. Nishimura does not explicitly disclose that the air-permeable porous material of the back housing portion comprises a cellulose based material. However, Nishimura does not limit the material to a specific composition. Furthermore, air permeable porous materials comprising a cellulose based material for sound absorption were well known. Sheffer discloses a cellulose based (Para. 0132, lines 1-5) material (12) for use as a sound absorbing material. Therefore, it would have been obvious, at the time of Applicant's invention to provide a known material, as the air-permeable porous material taught by Sheffer, in the baffle portion taught by Nishimura, as a design choice.

23. As to claim 8, Nishimura remains as applied above to claim 4. Nishimura does not explicitly disclose that the unwoven fabric of chemical fiber of the back housing portion is combined with a porous material through an air-permeable adhesive layer to stabilize a shape of the fabric. However, combining a porous material through an air-



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permeable adhesive layer was well known. Sheffer teaches combining an unwoven fabric (Para. 0058, lines 3-4) of chemical fiber (12) with a porous material (22) through an air-permeable adhesive layer (26) to stabilize a shape of the cellulose based material. Therefore, it would have been obvious, at the time of Applicant's invention to provide a known material, as the air-permeable porous material taught by Sheffer, in the back housing portion taught by Nishimura, as a design choice.

24. As to claim 9, Nishimura and Sheffer remain as applied above to claim 5. Sheffer further discloses that said cellulose based material (12) of the back housing portion is combined with a porous (The material is air permeable and therefore porous; Para. 0086, lines 3-4) material (26) through an air-permeable adhesive layer (26) to stabilize a shape of the cellulose based material (12).

**25. Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al., U.S. Patent No. 4,058,688, published on 11/15/1977, (hereby Nishimura).**

26. As to claims 10 and 13 Nishimura remains as applied above to claims 1 and 11, respectively. Nishimura does not explicitly disclose a microphone device is attached to said headphone apparatus. Examiner takes official notice that attaching a microphone to a headphone apparatus was well known, in order to provide communication capabilities. Therefore, it would have been obvious to one of ordinary skill, to provide a

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microphone device, in the headphones taught by Nishimura, in order to provide the extra feature of two-way communication capability.

### ***Response to Arguments***

27. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record

- |    |                       |                     |
|----|-----------------------|---------------------|
| a. | US Patent Number      | <b>4,058,688</b>    |
| b. | US Patent Number      | <b>4,278,852</b>    |
| c. | US Publication Number | <b>2003/0134553</b> |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan C. Robinson whose telephone number is (571) 270-3956. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/R. R./

Examiner, Art Unit 2614

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614